

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Katharine Davis Wong on 08 June 2010.

The application has been amended as follows:

- Cancel claims 26-33, 40 and 41.
- Claim 38. A method of priming hematopoietic stem cells pre-transplant, comprising obtaining said cells, isolating from said cells an immature, CD34+ rich population, and exposing said cell population to an AChE-derived peptide, ~~or its functional fragments or derivatives, or compositions comprising thereof, wherein said peptide is denoted by SEQ ID NO:4~~ wherein the AChE-derived peptide comprises the amino acid sequence as set forth in SEQ ID NO:1.
- Claim 39. The method as defined in claim 38, wherein said cells may be obtained from ~~[[the]]~~ a subject in need of said transplant or from another donor.

Withdrawal of Previous Rejections/Objections

2. All previous claim objections are withdrawn in view of the amendments to the claims and the Brief Description of the Drawings.
3. All previous 112 2nd paragraph rejections are withdrawn in view of the cancellation of claim 34 and amendments to claim 37.
4. All previous 35 USC 112 1st paragraph rejections are withdrawn in view of the cancellation of claim 34 and 36 and the amendments to claims 35 and 37.
5. The rejection of claim 33 and 36 under 35 USC 102(b) as anticipated by Soreq et al. is moot in view of the cancellation of said claim.
6. The rejection of claim 35 under 35 USC 102(b) as anticipated by Soreq et al. is withdrawn as Applicants arguments are convincing.

Election/Restrictions

7. It is noted that the restriction between Group I and Group II as recited in the Office action mailed 05/08/2009 is **withdrawn in-part** for claims 38 and 39 as said claims have been rejoined above. Said requirement remains in place for the previously pending claims of Group I (e.g. 26-33).

Reasons for Allowance

8. The following is an examiner's statement of reasons for allowance: the claims are drawn to methods of treatment of conditions wherein lymphocyte activity is reduced by treating or contact immature blood cells from blood, contacting said AChE peptide of

SEQ ID NO: 1 with said cell and reintroducing said blood into the same or a different patient. Also to a method of inducing a shift in activity of lymphocytes by contacting in vitro and/or ex vivo said lymphocytes with said SEQ ID NO: 1. Soreq et al. US 2003/0036632 is the closest prior art, however, Soreq et al. teaches the contacting step is always performed with mature cells such as blood endothelial cells (e.g. cells which have already differentiated). Furthermore, there is no suggestion of motivation or even mention that said SEQ ID NO: 1 could alter the activity of lymphocytes and thus the claims are deemed novel and non-obvious over the prior art. As such, **claims 35, 37-39 41 and 42 are allowed.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUZANNE M. NOAKES whose telephone number is (571)272-2924. The examiner can normally be reached on 7.00 AM-3.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SUZANNE M. NOAKES/
Primary Examiner, Art Unit 1656
08 June 2010